

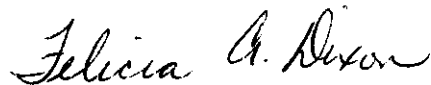
# **Differentiated Instruction in Action**

An Honors Thesis (HONRS 499)

By

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## **Abstract**

Differentiated instruction has quickly become the hottest topic amongst education professionals. Every teacher wants to reach his students more personally, more efficiently, and more often with curriculum; and the concept of differentiating instruction proposes to accomplish all these goals. More educators need to work to incorporate this method into more traditional teaching methods. This paper begins by explaining the concept and various ways to approach it; following the explanation, examples of lesson plans differentiated in each piece (content, process, and product) by each variable (readiness, interest, and learning profile) are provided. Finally, evidence of the positive effects of differentiated instruction during the author's student teaching experience at Angola High School in Angola, Indiana is included. Also included is a copy of the unit plan created and implemented for the study.

## **Acknowledgements**

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Without her knowledge of and dedication to the practice, I might never have discovered differentiated instruction.

-I would also like to thank Deb Blaz at Angola High School for all her help and encouragement throughout my student teaching. Working so closely with a supervising teacher who is not only knowledgeable but also enthusiastic about differentiated instruction was a rewarding and valuable experience.

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## Differentiated Instruction in Action

From the time I made the decision to become a teacher, I struggled with the goal of becoming a good teacher. Too many times I sat in my high school English classes with nothing to do. I had already mastered the material, and I was bored. In my math classes, however, I often had the opposite problem; I felt that I was behind in my understanding and mastery of new material. I was often not interested in my assignments or disliked one teacher's particular teaching style. I did not want any of my students to feel this way about the classes I taught, but I was unsure of a way to reach each student every time. Luckily, one of my required teacher education classes was educational psychology 390, in which I was introduced to differentiated instruction. It seemed a miracle; finally, a way to reach more students more of the time!

Most school curriculum is based on the idea that all students in the same class at the same grade level should be capable of accomplishing the same tasks in the same way at the same time. Differentiated instruction challenges this idea, and instead embraces student differences in readiness, interest, and learning style to adapt curriculum for different learners. Instead of beginning at page one of the textbook and moving straight through to the end, a teacher differentiating instruction carefully calculates the changes necessary to help each student learn to the best of his ability (Tomlinson 2.)

In order to differentiate, the teacher must first decide upon the key elements of the chapter or unit. It is unreasonable to expect any teacher or student to remember every fact in the textbook, so it is imperative that "the teacher carefully fashions instruction around the essential concepts, principles, and skills" (Tomlinson 9) of the given subject.

Making expectations clear to students helps less able students know what requires their focus and allows students who have mastered the expectations to move on to more complex pieces of the subject.

Another hallmark of a differentiated classroom is formative assessment. The traditional classroom has summative tests and exams at the end of a chapter or unit, but a differentiated classroom views assessment as “ongoing and diagnostic.” Ongoing assessment allows a teacher to know daily student readiness, interest and learning style. Plans will need to be modified, perhaps each day, to aid student success (Tomlinson 10).

After closely examining the formative assessments, the teacher modifies one of three parts of the lesson, the content, the process, or the product. The content is the concept students are to learn and the materials they use to do so. Process is what the students do to reach understanding and mastery of the material. Products are the ways students show the teacher they have mastered the material (Differentiating Instruction).

Each of the three parts of the lesson may be modified according to one of three ways students differ: readiness, interest, or learning profile. Readiness refers to how ready a student is to learn a particular skill. Less ready students may require more direct instruction or concrete tasks and operate at lower levels of Bloom’s taxonomy, while more ready students require more abstract and complex assignments or a more brisk pace of covering material and may be capable of operating on the higher levels of Bloom’s taxonomy. Interest is each individual student’s passion for a certain topic. For example, a student may enjoy world civilization class because he/she is interested in French language or culture and can tie that interest to history lessons. Finally, learning profile

refers to the way individuals prefer to learn new concepts. This can deal with Gardner's multiple intelligences, culture differences, or learning style (Tomlinson 11).

To differentiate by readiness, the teacher employs strategies such as adjusting questions, compacting, and tiered assignments. Adjusting questions is something most good teachers already do in the classroom, which is simply to direct questions which require higher level thinking to more ready students and questions which require a lower level of thinking at less ready students. Compacting can be achieved by means of a pretest, on which students can prove to have already mastered a certain lesson's instruction, and instead of doing this same material again, work on more advanced skills. A tiered assignment is written to have two or more activities occurring simultaneously that differ in intricacy level to aid students in mastery of the content (Theroux 1).

Teachers who know their students' interests can easily differentiate tasks to be more meaningful for students. This can be achieved through simple surveys of student interest or employing graphic organizers for brainstorming the many ways to explore a larger chapter or unit topic. Theroux recommends two software programs, Mindmanager (<http://Mindjet.com>) and Inspirations, to aid "the teacher in guiding students through exploring a concept and focusing on manageable and personally interesting subtopics" (Theroux 1).

Learning profile deals with an individual student's preferences for learning. Time of day for optimal learning, environment (such as lighting and background noise), and learning style (visual, auditory, and kinesthetic) all make up the learning profile. Some of these components are beyond a teacher's control: for example, afternoon learners who have a class in the morning may have trouble getting started. The teacher can compensate by planning activities to get the afternoon learners moving and help wake them in the morning. One easy way to do this is to

incorporate movement into lessons, such as having the students get out of their seats to hand in papers rather than simply passing them to the front. Also, more partner work, which requires interaction with another person, can be planned rather than individual work such as silent reading or watching a movie (Blaz).

Here are three examples of differentiated lessons, one differentiated in each aspect of the lesson (content, process, and product) according to a specific differentiation variable (readiness, interest, and learning profile):

### **Differentiated in Content by Readiness**

**Standard:** Indiana world language standard 4.2.4: Demonstrate comprehension of particular literary selections and 4.3.1: Write short well-organized compositions on given topics.

**Objective:** Students will read and evaluate children's stories in the target language.

**Content:** Since some students have more developed reading skills than others, the assigned literature varies in complexity. The least ready students will read a collection of familiar fairytales, such as *Snow White*, *Goldilocks and the Three Bears*, and *Sleepy Beauty* in French. They will work on main ideas and paragraph formation. The middle readiness students will read a collection of stories about Petit Nicolas, an ornery little French boy who has various adventures. This group will work on understanding the author's choice of verbs in different sections of the story. The most ready students will read *Le Petit Prince*, a longer and complete children's book, which has an underlying story line for adults that the students will attempt to grasp.

**Process:** The process is the same for all the students, for they will all be reading and

answering questions that check for understanding.

**Product:** All students will turn in a final paper discussing the book(s).

As for the product, all to meet Indiana world language standard.

### **Differentiated in Process by Learning Profile**

**Standard:** Indiana foreign language standard 2.1.3 Give and respond to oral directions and commands.

**Objective:** Students will use and follow directions to get from one place to another.

**Content:** A class of French II students is learning vocabulary for giving and following directions. All students have the same vocabulary list.

**Process:** The class is split amongst auditory, visual, and kinesthetic learners, so the lesson must be adapted to meet the needs of all three learning styles. All the students have the same map and the same vocabulary, therefore the content is the same. The auditory learners will pair up, using two different maps of the same town with different buildings filled in on each map, practice asking for and giving directions to the different destinations on the map. The visual learners will read a list of directions and discover the endpoints of each set of directions. At the same time, the kinesthetic learners will map out the town in the classroom by putting desks in rows to form streets, and they will physically take themselves from one place to another while following written directions. While each group of students is practicing the same skills and is expected to achieve the same curriculum goals, the way students reach the understanding and mastery is different.



**Product:** The product is non-differentiated because all students will discover the same locations on the map; it is only the means by which they discover them that differs.

### **Differentiated in Product by Interest**

**Standard:** Indiana world language standard 2.5.3: Identify and describe various products of the culture.

**Objective:** Students will create a meaningful artifact to represent Normandy.

**Content:** During a unit on the regions of France, French II students are asked to complete a project to represent the Normandy region.

**Process:** This will vary depending on the project the student undertakes, but it must involve *creating* something.

**Product:** Students are given some suggestions, such as a PowerPoint, a poster, a map, a food, a video, or a song or rap. They also have the option to invent a project on their own with teacher approval. If a student likes to cook, he/she can make a food typical of the region. If he/she likes technology, a PowerPoint on the region is a good choice. The possibilities are limited only by the student's interest and imagination.

It is important to note that differentiation should not be used as a means of tracking. The groupings should be flexible; some students will be extremely ready on one topic and show very low readiness on a different topic. Students can and should be placed in different groups based on readiness, interest, and learning profile for different assignments, and lessons should be differentiated according to different variables rather than concentrating on one variable too frequently. Students should get to work with any

and all of their classmates if differentiation is achieved, rather than be tied to one group for each assignment (*Differentiating Instruction*).

Along the same lines, the more ready groups should not be expected to do more or extra work. Instead, the depth of inquiry or the difficulty of the content or product should be more advanced. The amount of work should be the same for all students, for they should all be actively engaged in meaningful activities. Likewise, a lesson differentiated by interest should be just that; if many students have similar interests, it is quite possible they will all choose the same assignment and should not be forced to choose another interest (*Differentiating Instruction*).

Teachers soon realize that differentiating can be quite time consuming; however, it is necessary to realize that it is impossible to differentiate every lesson every day. On the contrary, a differentiated classroom may see days where “whole-class, non-differentiated fare is the order of the day” (Tomlinson 11). Differentiating should only occur when formative evaluation shows students have a need for it and doing so will help more students understand more of the lesson. While differentiating can take more time initially, the amount of time spent re-teaching can be drastically decreased if the differentiating is done to fit the students’ needs for mastering the material the first time through (Tomlinson).

Differentiation also requires teachers to give up more comfortable, traditional teaching methods. Instead of the standard lecture and worksheet routine, a teacher must learn to use and embrace multiple teaching strategies. The role of the teacher must vary depending on the needs of the students, and the teacher must give up some of the power

associated with his/her position in the traditional classroom. Theroux summarizes this new position of the teacher by saying:

The teacher becomes a facilitator, assessor of students and planner of activities rather than an instructor. This is what Roger Taylor called the "Guide on the Side rather than the Sage on the Stage" approach.... It is less structured, more busy and often less quiet than traditional teaching methods.

Teachers should not be afraid of this new position, but welcome the effects it will show in student learning (Theroux 1).

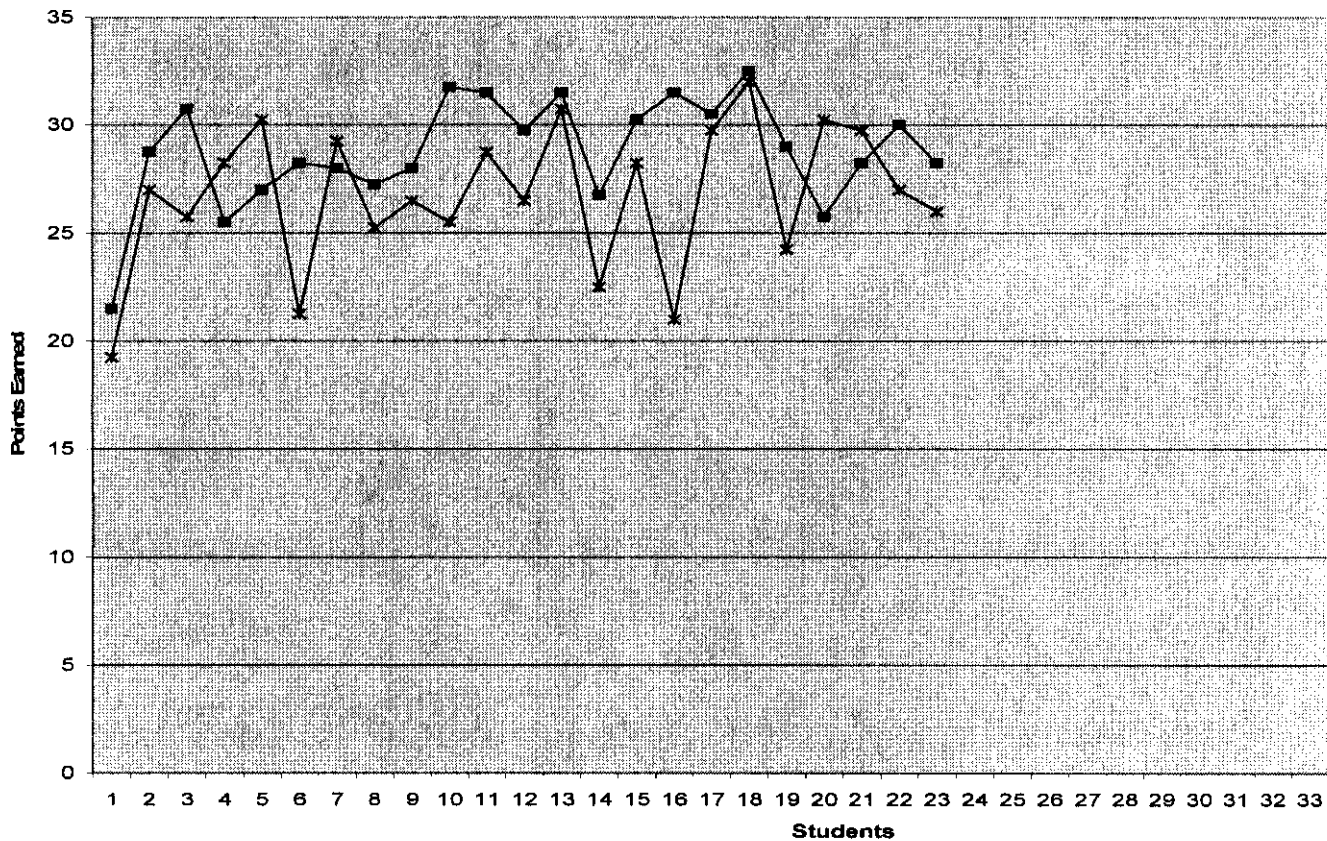
A key point is that lessons do not need to be differentiated for every student. That would be nearly impossible, especially for a secondary teacher who sees over one hundred students each day. Instead, the teacher is merely offering options, creating different ways for students to master the lesson. These different options are all taking place simultaneously, therefore all students are putting the same amount of time into the lesson. No one is required to stay after school to complete differentiated curriculum. In any given differentiated lesson, the teacher should offer two, three, or sometimes four choices or means to reach the same material (Tomlinson 15).

The foreign language classroom is an especially useful place for differentiating instruction. Indiana does not include foreign language education as a general graduation requirement; however, it is a requirement for students who wish to earn the Indiana academic honors diploma. Therefore, the students who elect to work toward the academic honors diploma are generally able to operate at higher level thinking. This fact by no means diminishes the need for differentiated instruction in the foreign language classroom; instead it necessitates it even more. Too often the foreign language teacher believes that all their students will learn at the same rate because they are encountering a

totally new subject area, or sometimes the teachers believe that differentiated instruction is only applicable to compulsory, total inclusion subjects. While all students begin foreign language acquisition by knowing nearly nothing of the language, all the students within one class will progress at different speeds. The students will put forth much effort to master the material, so making the material more accessible to students through differentiating according to readiness, interest, and learning profile simply means mastering more material more quickly.

The French II students at Angola High School in Angola, Indiana, recently finished a unit on Martinique. The unit was split in half, with a summative assessment at the end of each half. The first half relied heavily on differentiated lessons, and the second half contained very few differentiated lessons. The following graph was created to compare the two halves and the effects of differentiated curriculum on student performance. The pink line represents student scores on the differentiated portion of the unit, while the purple line shows the scores on the second, non-differentiated portion of the unit. The overall performance on the summative evaluations, or tests, clearly shows that the students more fully mastered the material and earned higher grades on the test when the instruction was differentiated (Manahan).

Effects of Differentiated Instruction



In addition to the differentiated instruction leading up to the test, the test for the first half of the unit was itself differentiated. The test contained thirty-two possible points, but the score was taken out of thirty. Students were asked to select two points they wished to omit from the test and simply leave them blank (Manahan 26). This allowed the student to decide how to differentiate the assessment. For example, a visual learner could decide to skip two of the listening questions which might be easier for an auditory learner. A student who was interested in the culture of Martinique could choose to answer all of the culture related questions and skip two related to geography, and a less ready student could decide to skip two questions that required higher level thinking and

instead answer all the vocabulary matching questions. All the students proved their mastery of the curriculum, for they were only allowed to skip two questions; however, every student had a chance to improve his/her by answering questions that appealed to him/her. In this manner, the student himself/herself is taking on the responsibility of evaluating his/her own strengths and weakness in readiness and learning profile and his/her own interests. The second test was not differentiated, and students were required to answer each question (Manahan 27).

The first half of the unit began with a web search to introduce the students to the island. The web search provided necessary guiding questions to facilitate student learning; however, each student was free to work at his own pace and explore more fully the topics of his own interest. Students were also asked to share their favorite fact about Martinique as a ticket out of the classroom. Both of these activities were differentiated in content by interest. Student responses varied and included geography, food, music, and language (Manahan).

The following day students learned vocabulary dealing with giving directions and making comparisons. To provide a point of reference for the vocabulary and prove how useful it truly is, the students each produced a paragraph using the vocabulary to describe Angola and compare it to Martinique, which was differentiated by interest. The students could describe Angola using the places that are important to them, and they could compare it positively or negatively to any place they wished. Some students talked about the YMCA, some about the library, and others about the places they work or their own homes. Some students described Angola as boring and simple, and others used adjectives

such as peaceful, fun, and safe. These new vocabulary words were then useful to them because they used them in a meaningful context (Manahan).

Students were then asked to design their own islands, an assignment which is differentiated in content by interest. Using only French, all students had to answer guiding questions, write a paragraph description for a travel book, and draw and label the island, so the process was the same. Each student produced an island and a description, so the product was the same. The content, though, was limited only by the students' imaginations. One student designed an arctic island shaped like a penguin, another made a chicken island based on her favorite food, and still others simply made their own versions of tropical islands (Manahan).

To review for the test, students watched a silent filmstrip and provided the soundtrack *en français*. This was differentiated in content by readiness, for the more ready students were able to provide more complete and detailed descriptions and comparisons. The less ready students could still participate, giving simple answers, recalling vocabulary words, and providing limited descriptions. Students also had class time to review online using the practice on the textbook's website. This allowed each student to choose the topic for which he/she felt the most need to review, so this activity was also differentiated in content by readiness (Manahan).

The second half of the unit contained only one truly differentiated assignment. This was a story-telling exercise in which students worked in pairs, taking turns telling stories using the reflexive verbs in the unit. The student who was listening had a series of flashcards representing the reflexive verbs, and he/she had to arrange the cards in the order of the speaking partner's story. Because students could tell of their own routines or

invent one, this assignment was differentiated in content by interest. The process was the same, for all students told stories and used flashcards; and the product was the same, for all students put the cards in order.

The remainder of this portion of the unit consisted of more traditional and non-differentiated assignments such as worksheets (Manahan 18) and board races. While the students did well on these formative assessments and seemed to enjoy them, they were definitely not personalizing the material. Visual learners were the primary beneficiaries of instruction, and a few less ready students struggled with mastery of the vocabulary and grammar concepts at the same rate as other students.

Comparing results of the two tests, it is clear that the majority of students performed at a higher level on the first test with the benefits of the differentiated instruction and assessment. Also, no students failed the first test, but one did fail the non-differentiated second test. Several students saw drastic drops in test scores on the second test; they are likely the strongly auditory and kinesthetic learners that the more traditional teaching methods neglected. The mean on the differentiated test was 28.79 points out of thirty possible points compared to a mean of 24.63 points out of thirty possible on the non-differentiated test. This is a comparison of ninety-six percent on the first test, or an "A", to eighty-two percent on the second test, or a "C."

Clearly, the French II students at Angola High School profited from receiving differentiated instruction. The drastic change in their test scores when lessons were not differentiated is evidence that any new material can be made more accessible to more students by implementing differentiation strategies. Due to its incredible track record thus far, the practice of differentiating instruction is becoming a necessary job skill for



novice and veteran educators alike. If the goal of a teacher is to assist students in the mastery of a given curriculum, then all teachers should embrace this idea and work to incorporate the various strategies in the classroom. While these practices do stray from the traditional approaches to teaching, educators must learn to adapt and to accept changing ideas in instruction. Something so valuable for students must not be overlooked.

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